

VITA
Varun Dutt

GENERAL INFORMATION

Associate Professor
School of Computing and Electrical Engineering
School of Humanities and Social Sciences
Indian Institute of Technology Mandi
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Web: <https://faculty.iitmandi.ac.in/~varun/>;
https://www.researchgate.net/profile/Varun_Dutt;
<https://scholar.google.com/citations?user=jly9u8AAAAAJ&hl=en>;

RESEARCH INTERESTS

- Artificial Intelligence and Cognitive Modeling (modeling human behavior in dynamic tasks through computer algorithms)
- Human-Computer Interaction (study of the interaction between people and computers)
- Situation Awareness (recognition, comprehension, and projection of a situation in the decision environment)
- Judgment and Decision Making (understanding human behavior in problems involving risk and uncertainty)
- Environmental Decision Making (understanding human behavior in environmental problems)

ACADEMIC TRAINING

Graduate:	Ph.D., Engineering and Public Policy, Carnegie Mellon, USA	2011
	M.S., Engineering and Public Policy, Carnegie Mellon, USA	2010
	M.S., Software Engineering, Carnegie Mellon, USA	2006
Undergraduate:	B. E., Computer Science and Engineering, Thapar University, India	2004

SKILLS

I am currently working as an Associate Professor in the School of Computing and Electrical Engineering and School of Humanities and Social Sciences at Indian Institute of Technology Mandi. I am applying my knowledge and skills in the fields of computer science, psychology, and public policy to explore how humans make decisions on social, managerial, and environmental issues. My Ph.D. thesis focused on answering the question *why do we want to defer actions on climate change*, and I have investigated the question by applying literature on people's risk-preferences, time-preferences, social-cultural dilemmas, and linear thinking. I have used lab-based methods involving human participants and cognitive models to investigate my research questions.

In addition to my thesis research, I have investigated how people explore and exploit alternatives and make decisions from experience in risk and uncertainty at both individual and group levels. For this investigation, I have created human factors and cognitive models of human behavior using principles of instance-based learning, reinforcement learning, and Bayesian learning theories. The typical approach I have followed has focused on model creation, prediction, validation by running lab-based experiments, and further model generalization or model cross-validation in novel task situations.

ACADEMIC RESEARCH EXPERIENCE

INSTITUTION	POSITION	DATES
School of Computing and Electrical Engineering and School of Humanities and Social Sciences, Indian Institute of Technology, Mandi, India	Associate Professor	April 2019 – Present
School of Computing and Electrical Engineering and School of Humanities and Social Sciences, Indian Institute of Technology, Mandi, India	Assistant Professor	June 2012 – Mar 2019
Dynamic Decision Making Lab, Carnegie Mellon, Pittsburgh, PA, USA	Post-doctoral Fellow	Aug 2011 – May 2012
Dynamic Decision Making Lab, Carnegie Mellon, Pittsburgh, PA, USA	Graduate Research Assistant	Aug 2007 – Aug 2011

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Dynamic Decision Making Lab, Carnegie Mellon,
Pittsburgh, PA, USA

Research Programmer

May 2006 – Jul 2007

TEACHING EXPERIENCE

COURSE	DATES
<i>Assistant/Associate Professor, Indian Institute of Technology Mandi, India</i>	
IC 252: Data Science 2	Feb 2019, Feb 2020
IC 272: Data Science 3	Aug 2019, Aug 2020
CS 202: Data Structures and Algorithms	Aug 2020
HS523: Decision-making for Social Change	Feb 2019, Feb 2020
IC 201P: Prototype Development	Feb 2019, Feb 2013, Feb 2014, Feb 2020
HS 528: Information Technology and Development	Aug 2018, Aug 2019, Aug 2020
CS 207: Applied Database Practicum	Aug 2018, Aug 2019
5-Week Induction Program	Aug, 2017, Aug 2018, Aug 2019
IC 250: Programming and Data Structure Practicum	Feb 2018
CS 606: Computational Modeling of Social Systems	Feb 2019, Feb 2018, Feb 2017
RM 600 Research Methodology	Aug 2020
HS 616: Managerial Thinking and Decision Making	Aug 2014, Aug 2015, Feb 2018
CS 660: Data Mining for Decision Making	Aug 2015, Feb 2017, Aug 2018
EM 604: Energy: Environment Policy and Law	Feb 2015, Aug 2015, Feb 2016
	Aug 2017
CS 303: Software Engineering	Aug 2012, Aug 2013, Aug 2014
IC 150P: Computation for Engineers Lab	Feb 2013, Aug 2014
DP 301P: Interactive Socio-Technical Practicum	Feb 2014, Feb 2016, Feb 2017, Feb 2018, Feb 2019, Feb 2020
	Feb 2013, Feb 2014, Feb 2016
CS 506: Cognitive Modeling	Feb 2013, Feb 2014, Feb 2016
CS 308: Large-Scale Applications Practicum	Feb 2014, Feb 2015, Feb 2016, Aug 2016
CS 208: Mathematical Foundations of Computer Science	Aug 2013
HS 301: Public Policy and Advocacy Skills Engineering	Aug 2013
IC 100: Reverse Engineering	Aug 2013
CS-603: Managerial Decision Making	Aug 2012
<i>Graduate Teaching Assistant, Carnegie Mellon University, Pittsburgh, PA</i>	
88-431: Dynamic Decision Making	May 2007 - Jul 2007
19-752: EPP Project Management	Jan 2010 - May 2010
05-775: Cognitive Perspective in HCI	Jan 2010 - Feb 2010

ACADEMIC ADMINISTRATIVE EXPERIENCE

Institution	Position	Date
Indian Institute of Technology Mandi, India	Advisor, WING (Website)	Feb 2020 – Present
Indian Institute of Technology Mandi, India	Lead Coordinator, TIH (HCI)	May 2020 – Present
Indian Institute of Technology Mandi, India	Advisor, Alumni Affairs Cell	Feb 2020 – Present
Indian Institute of Technology Mandi, India	Advisor, Training and Placement Cell	Nov 2018 – Feb 2020
Indian Institute of Technology Mandi, India	Associate Dean, International Relations	Aug 2015 – Apr 2020
Indian Institute of Technology Mandi, India	SCEE Member, Senate	Nov 2012 – Apr 2020
Indian Institute of Technology Mandi, India	Chief Warden	Feb 2015 – Nov 2017
Indian Institute of Technology Mandi, India	Faculty Advisor, B. Tech. Students	Aug 2012 – Aug 2016
Indian Institute of Technology Mandi, India	Member, SHSS Purchases	Jan 2013 – Aug 2016
Indian Institute of Technology Mandi, India	Co-Advisor, International Relations	Aug 2012 – Aug 2015
Indian Institute of Technology Mandi, India	Advisor, Recruitment Cell	Jan 2013 – Aug 2015
Indian Institute of Technology Mandi, India	Member, SCEE Purchases	Jan 2013 – Feb 2014
Indian Institute of Technology Mandi, India	Warden, Nako Hostel	May 2014 – Feb 2015

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Indian Institute of Technology Mandi, India	Asst. Warden, Nako Hostel	Aug 2012 – Feb 2014
Indian Institute of Technology Mandi, India	Member of Editorial Team, SCRI	Aug 2012 – Dec 2012
Indian Institute of Technology Mandi, India	Advisor, Programming Club	Aug 2012 – Dec 2012
Indian Institute of Technology Mandi, India	Coordinator, Design Practicum	Jan 2013 – Jun 2013
Indian Institute of Technology Mandi, India	Member, Course Proposal Committee	Jan 2013 – Sep 2013

PROFESSIONAL EXPERIENCE

INSTITUTION	POSITION	DATES
Intiot Services Pvt. Ltd., India	Founder and Executive Director	Apr 2019 - Present
RxDataScience Inc., NY, USA	Board of Governor	Jan 2018 - Present
Intergovernmental Panel on Climate Change (IPCC)	Lead Author (Chapter 2)	Nov 2012 – Mar 2014
Newspaper Financial Chronicle, Inc., India	Knowledge Editor	Dec 2008 – Aug 2018
Newspaper Economic Times, Inc., India	Freelance Journalist	Aug 2006 – Aug 2007
Messenger Service Inc., Pittsburgh, PA, USA	Software Engineer	Aug 2006 - Sep 2006
Tata Consultancy Services (TCS), India	Software Engineer	Feb 2005 - Jun 2005
MotherSumi Infotech and Designs Ltd.	Software Engineer	Aug 2004 - Jan 2005

PROJECTS

1. Why do people exhibit a lack of Understanding about Earth's Climate? Influence of Repeated Feedback, IITM/SG/VD/32, INR 5 lakhs, IIT Mandi, Sep 2014 – Sep 2017
2. Building a Secure and Trustworthy Cyberspace: A Behavioral Game-Theoretic Approach, IITM/DST/VD/64, INR 23 lakhs, DST, Dec 2014 – Dec 2017
3. Machine Learning and Data Mining for Sales and Analytics in Pharma, IITM/CONS/PPLP/VD/03, INR 60 lakhs, Purdue Pharma L.P. USA, Feb 2015 – Feb 2018
4. Visvesvaraya PhD Scheme for Electronics & IT in 2014-15, IITM/DeitY-MLA/ASO/93, INR 217 lakhs, DeitY-MLA, Aug 2015 – Present
5. Decisions from experience: AN ERP investigation of decision based on valuation of outcomes and probabilities, IITM/DST/DB/89, INR 18.6 lakhs, DST, Aug 2015 – Oct 2017 (Mentor: Dr. Varun Dutt)
6. Visualization of Big Data in Pharma, IITM/CONS/PPLP/VD/05, INR 6 lakhs, Purdue Pharma, L.P., USA, Aug 2015 – June 2016
7. Development of human-performance modeling framework via physiological and signal processing tools for visual cognitive enhancement in IVD, VR and AR paradigms, IITM/DRDO-CARS/VD/110, INR 22 lakhs, DRDO, Jun 2016 – Jun 2019
8. Efficient query and visualization of Big Data, IITM/CONS/RxDSI/VD/07, INR 6.5 lakhs, Rx Data Science Inc., USA, Sep 2016 – Jun 2017
9. Development and evaluation of landslide risk communication solutions in Mandi District of H.P., IITM/HPSCSTE/VD/130, INR 5.14 lakhs, Himachal Pradesh State council for Science, Technology & Environment (SCSTE), Nov 2016 – Nov 2018
10. Design and Development of a Smart Seat-Belt Monitoring System, INR 10.5 lakhs, HE India, Feb 2017 – Feb 2019
11. Application for mining rare diseases and analyzing and predicting patient journeys, IITM/CONS/RxDSI/VD/16, US \$21,667, RxDataScience Inc., USA, Nov 2018 - Aug 2019
12. Development and evaluation of low-cost landslide early warning solutions, IITM/DRDO-DTRL/VD/179, INR 10 lakhs, DRDO-DTRL, Oct 2017 – Oct 2020
13. Development and evaluation of low-cost landslide monitoring solutions, IITM/NDMA/VD/184, NDMA, INR 27.8 lakhs, Dec 2017 – Dec 2020
14. Design of Advanced Big Data Analytics in the CygNet Management System for large telecom networks, IITM/MHRD(UAY)/AD/115, MHRD, INR 140 lakhs, Jun 2016 – Jun 2020 (Co-PI)
15. A Game Theoretic Approach involving Experimentation and Computational Modeling using Deception in Cyber Security, Department of Science and Technology (ICPS), INR 60 lakhs, Feb 2019 – Feb 2022
16. Public Perception of Air Pollution and development and testing of a low-cost Air Pollution Sensing and Warning System, IITM/DEST-HP/VD/240, INR 7,00,000, Department of Environment, Science and Technology, Shimla, Himachal Pradesh, May 2019 – May 2021

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17. Deployment of sensors for landslide monitoring and early warning, Deputy Commissioner Mandi (H.P.), IITM/DCoM/VD/204, INR 3,00,000, Jun 2018 – Jun 2021
18. Development and Deployment of low-cost landslide monitoring and warning system in district Sirmaur (H.P.), Deputy Commissioner Sirmaur (H.P.), IITM/DC-SIR/VD/226, INR 4,00,000, Jan 2019 – Jan 2020
19. Evaluation of quantitative systems pharmacology and machine learning models for blood glucose prediction, IITM/CONS/RxDSI/VD/33, RxDataScience Inc., USA, INR 15,26,400, Aug 2019 – Feb 2022
20. UKIERI – DST international workshop on adversarial cybersecurity, IITM/WS/VD/79, UKIERI – DST, INR 1,56,700, Sep 2020 – Oct 2020
21. Human Performance enhancement via tDCS in VR and performance forecasting via machine learning methods, ITM/DRDO-LSRB/VD/301, Life Sciences Research Board, DRDO, INR 49,13,480, Dec 2020 – Dec 2023
22. A low-cost MEMS-based and video-based monitoring and early warning system for rainfall-induced landslides, IITM/DST/VKU/300, INR 40 lakhs, DST, Dec 2020 – Dec 2023 (Co-PI)
23. Low-cost extensometer- based landslide monitoring and early warning device, IITM/DST/KVU/316, DST, INR 44,87,288, Feb 2021 – Feb 2024 (Co-PI)
24. Replicating human cognitive behavior on robots' models using ACT-R cognitive architecture for search-and-retrieve missions in virtual environments, IITM/DRDO/VD/324, CAIR DRDO, INR 36,08,440, Mar 2021 – Mar 2023
25. Evaluation of risk perception, fear, social distancing, masks and treatments regarding Covid-19 in India, IITM/ICSSR/VD/317, ICSSR, INR 3,25,000, Mar 2021 – Sept 2021
26. Deployment of low-cost landslide monitoring and warning systems, IITM/DDMA-M/VD/325, DDMA, INR 49,20,000, Feb 2021 – Feb 2024
27. Technology Innovation Hub (HCI), DST, NM-ICPS, INR 110,00,000, Dec 2020 – Dec 2025 (Project Director)

SCHOLARSHIPS AND FELLOWSHIPS

INSTITUTION	NAME	DATES
Carnegie Mellon University	Visiting Faculty, Social and Decision Sciences	Dec 2013 – Jan 2014
Max Planck Institute for Human Development	Summer Institute on Bounded Rationality	Jul 2009 – Aug 2009
Carnegie Mellon University	Steinbrenner Fellowship	Aug 2008 – Aug 2009
Carnegie Mellon University	Dean's Fellowship	Aug 2007 - May 2008
Carnegie Mellon University	ACT-R Summer School	Jul 2007 – Aug 2007
Thapar University	Tuition Fellowship (1 st in Branch)	Aug 2000 – Aug 2001

BOOK PUBLICATIONS

Dutt, V. (2011). *Why do we want to defer actions on climate change? A psychological perspective* (Doctoral dissertation). Carnegie Mellon University. Pittsburgh, PA, USA.

JOURNAL PUBLICATIONS

Gupta, A., Roy, P., **Dutt, V.** (in press). Evaluation of Instance-based Learning and Q-learning algorithms in dynamic environments. *IEEE Access*.

Aggarwal, P., Moisan, F., Gonzalez, C., & **Dutt, V.** (in press). Learning About the Effects of Alert Uncertainty in Attack and Defend Decisions via Cognitive Modeling. *Human Factors*.

Aashima, Bhargav, S., Kaushik, S., & **Dutt, V.** (in press). Development of Ensemble Tree Models for Generalized Blood Glucose Level Prediction. *Lecture Notes in Electrical Engineering*.

Pathania, A., Kumar, P., Priyanka, A. M., Kumar, M., Singh, R., Chaturvedi, P., & **Dutt, V.** (in press). Predictions of soil movements using Persistence, Auto-regression, and Neural network models: A case-study in Mandi, India. *International Journal of Swarm Intelligence*.

Katakwar, H., Aggarwal, P., Maqbool, Z., **Dutt, V.** (in press). Influence of probing action costs on adversarial decision-making in a deception game. *Lecture Notes in Networks and Systems*.

Aashima, Bhargav S., Kaushik, S., & **Dutt, V.** (in press) A Combination of Decision Trees with Machine Learning Ensembles for Blood Glucose Level Predictions. *Lecture Notes in Computer Science*.

Pathania A., Kumar P., Priyanka, Maurya A., Uday K. V., & **Dutt V.** (2021). Development of an Ensemble Gradient Boosting Algorithm for Generating Alerts About Impending Soil Movements. *Lecture Notes in Electrical Engineering*, 749. doi: 10.1007/978-981-16-0289-4_28

Thakur, V., Robinson, K., Oguz, E. A., Depina, I., Pathania, A., Kumar, P., Chaturvedi, P., Uday, K. V., & **Dutt, V.** (2021). Early Warning of Water-Triggered Landslides. *Lecture Notes in Civil Engineering*, 140. doi: 10.1007/978-981-33-6590-2_11

Mali, N., **Dutt, V.**, & Uday K. V. (2021). Determining the Geotechnical Slope Failure Factors via Ensemble and Individual Machine Learning Techniques: A Case Study in Mandi, India. *Frontiers in Earth Science*, 9:701837. doi: 10.3389/feart.2021.701837

Kumar, P., Sihag, P., Chaturvedi, P., Uday, K., & **Dutt, V.** (2021). BS-LSTM: An Ensemble Recurrent Approach to Forecasting Soil Movements in the Real World. *Frontiers in Earth Science*, 9:696792. doi: 10.3389/feart.2021.696792

Choudhary, G., & **Dutt V.** (2021). Experience in a Climate Simulator: Influence of Probability Function and Feedback on Decisions Against Climate Change. *Frontiers in Psychology*, 12:674892. doi: 10.3389/fpsyg.2021.674892

Kumar, P., Sihag, P., Sharma, A., Pathania, A., Singh, R., Chaturvedi, P., Mali, N., Uday, K. V., **Dutt, V.** (2021). Prediction of Real-World Slope Movements via Recurrent and Non-recurrent Neural Network Algorithms: A Case Study of the Tangni Landslide. *Indian Geotech Journal*, 51, 788–810. doi: 10.1007/s40098-021-00529-4

Chaturvedi, P., & **Dutt, V.** (2021). Understanding Human Decision-Making in an Interactive Landslide Simulator Tool via Reinforcement Learning. *Frontiers in Psychology*, 11:499422. doi: 10.3389/fpsyg.2020.499422.

Pathania, A., Kumar, P., Priyanka., Maurya, A., Uday, K. V., & **Dutt, V.** (2020) Development of an Ensemble Gradient Boosting Algorithm for Generating Alerts about impending Soil Movements. In Workshop on Machine learning, Deep learning, and Computational Intelligence for wireless communication. *Lecture Notes in Electrical Engineering. Volume 749*

Rao, A. K., Chandra, S., & **Dutt, V.** (2020). Desktop and Virtual-Reality Training Under Varying Degrees of Task Difficulty in a Complex Search-and-Shoot Scenario. *Lecture Notes in Computer Science*, 12428, 421–439. https://doi.org/10.1007/978-3-030-59990-4_31

Agarwal, K., Uniyal, P., Virendrasingh, S., Krishna, S., & **Dutt, V.** (2020). Spam Mail Classification Using Ensemble and Non-Ensemble Machine Learning Algorithms. *Lecture Notes in Networks and Systems*, 141, 179-189.

Katakwar, H., Aggarwal, P., Maqbool, Z., & **Dutt, V.** (2020). Influence of Network Size on Adversarial Decisions in a Deception Game Involving Honey pots. *Frontiers in Psychology*, 11, 2385.

Tyagi, R., Aggarwal, P., Mohanty, M., **Dutt, V.**, & Anand, A. (2020). Computational cognitive modeling and validation of Dp140 induced alteration of working memory in Duchenne Muscular Dystrophy. *Nature Scientific Reports*, 10(1), 1-12.

Kumar, M., & **Dutt, V.** (2020). Understanding Decisions in Collective Risk Social Dilemma Games Using Reinforcement Learning. *IEEE Transactions on Cognitive and Developmental Systems*, 12(4), 824-840.

Kaushik, S., Choudhury, A., Natarajan, S., Pickett, L. A., & **Dutt, V.** (2020). Medicine expenditure prediction via a variance-based generative adversarial network. *IEEE Access*, 8, 110947-110958.

- Aggarwal, P., & **Dutt, V.** (2020). The role of information about opponent's actions and intrusion-detection alerts on cyber decisions in cyber security games. *Cyber Security: A Peer-Reviewed Journal*, 3(4), 363-378.
- Kaushik, S., Choudhury, A., Sheron, K.P., Sayee, N.D., Larry A. P., & **Dutt V.** (2020). AI in healthcare: time-series forecasting using statistical, neural, and ensemble architectures. *Frontiers in Big Data*, 3(4).
- Maqbool, Z., Aggarwal, P., Pammi, V. C., & **Dutt, V.** (2020). Cyber Security: Effects of Penalizing Defenders in Cyber-Security Games via Experimentation and Computational Modeling. *Frontiers in Psychology*, 11 (11).
- Sangar, S., **Dutt, V.**, & Thakur, R. (2020). Coping with out-of-pocket health expenditure in India: evidence from NSS 71st round. *Global Social Welfare*, 7(3), 275-284.
- Maqbool, Z., & **Dutt, V.** (2019). Behavioural Cybersecurity: Investigating the influence of patching vulnerabilities on cyber decision-making via cognitive modeling. *Journal of Cyber Situation Awareness*, 4(1), 185-209.
- Kumar, M., & **Dutt, V.** (2019). Alleviating misconceptions about Earth's climate: evidence of behavioral learning in stock-and-flow simulations. *System Dynamics Review*, 34(4), 503-526.
- Sangar, S., **Dutt, V.**, & Thakur, R. (2019). Comparative Assessment of Economic Burden of Disease in Relation to Out of Pocket Expenditure. *Frontiers in Public Health*, 7.
- Sangar, S., **Dutt, V.**, & Thakur, R. (2019). Distress financing of out-of-pocket health expenditure in India. *Review of Development Economics*, 23(1), 314-330.
- Aggarwal, P., Moisan, F., Gonzalez, C., & **Dutt, V.** (2018). Understanding Cyber Situational Awareness in a Cyber Security Game Involving Recommendations. *International Journal of Cyber Situational Awareness*, 3(1), 1-29.
- Choudhury, A., Kaushik, S., & **Dutt, V.** (2018). Social-network analysis in healthcare: analysing the effect of weighted influence in physician networks. *Network Modeling Analysis in Health Informatics and Bioinformatics*, 7(1), 17.
- Chaturvedi, P., Arora, A., & **Dutt, V.** (2018). Learning in an interactive simulation tool against landslide risks: the role of strength and availability of experiential feedback. *Natural Hazards and Earth System Sciences*, 18(6), 1599-1616.
- Sangar, S., **Dutt, V.**, & Thakur, R. (2018). Economic burden, impoverishment and coping mechanisms associated with out -of-pocket health expenditure: analysis of rural-urban differentials in India. *Journal of Public Health*, 1-10.
- Sangar, S., **Dutt, V.**, & Thakur, R. (2018). Rural–urban differentials in out-of-pocket health expenditure and resultant impoverishment in India: evidence from NSSO 71st Round. *Asia-Pacific Journal of Regional Science*, 3, 273–291.
- Sharma, N., Debnath, S., & **Dutt, V.** (2018). Influence of an intermediate option on the description- experience gap and information search. *Frontiers in Psychology*, 9, 364.
- Kumar, M., & **Dutt, V.** (2018). Experience in a Climate Microworld: Influence of Surface and Structure Learning, Problem Difficulty, and Decision Aids in Reducing Stock-Flow Misconceptions. *Frontiers in Psychology*, 9, 299.
- Chaturvedi, P., Arora, A., & **Dutt, V.** (2017). Learning in an Interactive Simulation Tool against Landslide Risks: The Role of Amount and Availability of Experiential Feedback, *Natural Hazards and Earth System Sciences Discussion*, DOI:10.5194/nhess-2017-297.
- Sharma, G., Kaushal, Y., Chandra, S., Singh, V., Mittal, A. P., & **Dutt, V.** (2017). Influence of Landmarks on Wayfinding and Brain Connectivity in Immersive Virtual Reality Environment. *Frontiers in Psychology*, 8, 1220.
- Sharma, N., & **Dutt, V.** (2017). Modeling decisions from experience: How models with a set of parameters for aggregate choices explain individual choices. *Journal of Dynamic Decision Making*, 3(3).
- Maqbool, Z., Makhijani, N., Pammi, V. C., & **Dutt, V.** (2017). Effects of Motivation: Rewarding Hackers for Undetected

Attacks Cause Analysts to Perform Poorly. *Human Factors*, 59(3), 420-431.

Kaushik, S., Choudhury, A., Mallik, K., Moid, A., & **Dutt, V.** (2016). Applying Data Mining to Healthcare: A Study of Social Network of Physicians and Patient Journeys. *Lecture Notes in Computer Science*, 9729, 599-613.

Gonzalez, C., & **Dutt, V.** (2016). Exploration and maximization during information search and experimental choice. *Journal of Dynamic Decision Making*, 2(2), 1-8.

Biswas, P., **Dutt, V.**, & Langdon, P. (2016). Comparing Ocular Parameters for Cognitive Load Measurement in Eye- gaze Controlled Interfaces for Automotive and Desktop Computing Environments. *International Journal of Human-Computer Interaction*, 32 (1), 23-38.

Dutt, V., & Gonzalez, C. (2015). Accounting for outcome and process measures in dynamic decision-making tasks through model calibration. *Journal of Dynamic Decision Making*, 1(1).

Gonzalez, C., Ben-Asher, N., Martin, J. M., & **Dutt, V.** (2015). A cognitive model of dynamic cooperation with varied interdependency information. *Cognitive Science*, 39(3), 457-495.

Dutt, V., Arlo-Costa, H., Helzner, J., & Gonzalez, C. (2014). The Description-Experience Gap in Risky and Ambiguous Gambles. *Journal of Behavioral Decision Making*, 27(4), 316-327.

Mehlhorn, K., Ben-Asher, N., **Dutt, V.**, & Gonzalez, C. (2014). Observed Variability and Values Matter Towards a Better Understanding of Information Search and Decisions from Experience. *Journal of Behavioral Decision Making*, 27(4), 328– 339.

Debnath, S., Baishya, S. S., Triebel, R., **Dutt, V.**, Cremers, D. (2014). Environment-Adaptive Learning: How Clustering Helps to Obtain Good Training Data. *Lecture Notes in Computer Science*, 8736, pp 68-79. doi: 10.1007/2F978-3-319-11206-0_8

Kumar, A., Prakash, J., **Dutt, V.** (2014). Understanding Human Driving Behavior through Computational Cognitive Modeling. *Lecture Notes in Computer Science*, 8662, pp 56-65. doi: 10.1007/978-3-319-11167-4_6

Dutt, V., & Kaur, A. (2013). Cyber Security: Testing the Effects of Attack Strategy, Similarity, and Experience on Cyber Attack Detection. *International Journal of Trust Management in Computing and Communications*, 1(3/4), 261-273. doi: 10.1504/IJTMCC.2013.056428

Dutt, V., Young-Suk, A., & Gonzalez, C. (2013). Cyber Situation Awareness: Modeling the Detection of Cyber Attacks with Instance-based Learning Theory. *Human Factors*, 55(3), 605-618. doi: 10.1177/0018720812464045

Proctor, R.W., Yamaguchi, M., **Dutt, V.**, & Gonzalez, C. (2013). Dissociation of S-R Compatibility and Simon Effects with Mixed Tasks and Mappings. *Journal of Experimental Psychology: Human Perception and Performance*, 39(2), 593-609. doi: 10.1037/a0029923

Gonzalez, C., **Dutt, V.**, & Lebiere, C. (2013). Validating Instance-Based Learning Mechanisms Outside of ACT-R. *Journal of Computational Science*, 4(4), 262–268. doi: 10.1016/j.jocs.2011.12.001

Dutt, V., & Gonzalez, C. (2013). Enabling eco-friendly choices by relying on the proportional-thinking heuristic. *Sustainability*, 5(1), 357-371. doi: 10.3390/su5010357

Dutt, V., & Gonzalez, C. (2013). Reducing the Linear Perception of Non-Linearity: Use of a Physical Representation. *Journal of Behavioral Decision Making*, 26(1), 51–67. 10.1002/bdm.759

Gonzalez, C., & **Dutt, V.** (2012). Data Aggregation and "Ensuing Problems for the IBL Model": A reply to Hills and Hertwig (2012). *Psychological Review*, 119(4), 893-898.

Dutt, V. & Gonzalez, C. (2012). Making Instance-based Learning Theory Usable and Understandable: The Instance-

based Learning Tool. *Computers in Human Behavior*, 28(4), 1227–1240. doi: 10.1016/j.chb.2012.02.006

Dutt, V. & Gonzalez, C. (2012). The role of inertia in modeling decisions from experience with instance-based learning. *Frontiers in Psychology*, 177(3), 1-12. doi: 10.3389/fpsyg.2012.00177

Dutt, V. & Gonzalez, C. (2012). Decisions from experience reduce misconceptions about climate change. *Journal of Environment Psychology*, 32(1), 19-29. doi: 10.1016/j.jenvp.2011.10.003

Dutt, V. & Gonzalez, C. (2011). Human Control of Climate. *Climatic Change*, 111(3-4), 497-518. doi: 10.1007/s10584-011-0202-x

Dutt, V. (2011). Explaining Human Behavior in Dynamic Tasks through Reinforcement Learning. *Journal of Advances in Information Technology*, 2(3), 177-188. doi:10.4304/jait.2.3.177-188

Dutt, V., Young-Suk, A., & Gonzalez, C. (2011). Cyber Situation Awareness: Modeling the Security Analyst in a Cyber-Attack Scenario through Instance-Based Learning. *Lecture Notes in Computer Science*, 6818, 280-292. doi: 10.1007/978-3-642-22348-8_24

Dutt, V., & Gonzalez, C. (2011). Why do we want to delay actions on climate change? Effects of probability and timing of climate consequences. *Journal of Behavioral Decision Making*, 25, 154-164. doi: 10.1002/bdm.721

Gonzalez, C. & Dutt, V. (2011). Instance-based Learning: Integrating Sampling and Repeated Decisions from Experience. *Psychological Review*, 118(4), 523-551. doi: 10.1037/a0024558

Gonzalez C., **Dutt V.**, & Lejarraga T. (2011). A Loser Can Be a Winner: Comparison of Two Instance-based Learning Models in a Market Entry Competition. *Games*, 2(1), 136-162. doi: 10.3390/g2010136

Gonzalez, C., & **Dutt, V.** (2011). A Generic Dynamic Control Task for Behavioral Research and Education. *Computers in Human Behavior*, 27, 1904–1914. doi: 10.1016/j.chb.2011.04.015

Lejarraga, T., **Dutt, V.**, & Gonzalez, C. (2010). Instance-based learning: A general model of repeated binary choice. *Journal of Behavioral Decision Making*, 25, 143-153. doi: 10.1002/bdm.722

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PATENTS

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Gonzalez, C., **Dutt, V.**, Martin, J., & Ben-Asher, N. (2012). Decisions from Experience in Conflict Situations: A cognitive model of the effects of interdependence information. In *Paper presented at the 2012 Behavioral Decision Research in*

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Varun Dutt

Management (BDRM) conference. Boulder, Colorado.

Dutt, V., Young-Suk, A., Ben-Asher, N., & Gonzalez, C. (2012). Modeling the Effects of Base-rates on Cyber Threat Detection Performance. In *Paper presented at the 11th International Conference on Cognitive Modeling*. Berlin, Germany.

Mehlhorn, K., **Dutt, V.**, Ben-Asher, N., & Gonzalez, C. (2012). Accumulation of Evidence and Information Search in Experiential Decisions. In *Paper presented at the 11th International Conference on Cognitive Modeling*. Berlin, Germany.

Dutt, V., & Gonzalez, C. (2011). Enabling eco -friendly choices by using human psychological biases. In *Paper to be presented at the 2011 Society of Risk Analysis Annual Meeting*. Charleston, SC, USA.

Gonzalez, C. & **Dutt, V.** (2011). Instance-Based Learning: Integrating Sampling and Repeated Decisions from Experience. In *Paper to be presented at the 32st Annual Conference of the Society for Judgment and Decision Making*. Seattle, WA, USA.

Arlo-Costa, H., **Dutt, V.**, Gonzalez, C., & Helzner, J. (2011). Decisions from Experience in Conditions of Uncertainty. In *Paper presented at Seventh International Symposium on Imprecise Probability: Theory and Applications*. Innsbruck, Austria.

Dutt, V., Yu, M., & Gonzalez, C. (2011). Deciding when to escape a mine emergency: Modeling accumulation of evidence about emergencies through Instance-based Learning. In *Paper to be presented at the HFES 55th Annual Meeting*. Las Vegas, Nevada, USA.

Dutt, V., & Gonzalez, C. (2011). Making Instance-based Learning Theory Usable, Transparent, and Understandable: Instance-based Learning Tool. In *Demonstration to be presented at the HFES 55th Annual Meeting*. Las Vegas, Nevada, USA.

Dutt, V., Young -Suk, A., & Gonzalez, C. (2011). Cyber Situation Awareness: Modeling the Security Analyst in a cyber- attack scenario through Instance-based Learning. In *Paper presented at the 25th Annual WG 11.3 Conference on Data and Applications Security and Privacy (to appear in Lecture Notes in Computer Science 6818 (LNCS 6818), Springer)*. Richmond, VA, USA.

Gonzalez, C., **Dutt, V.**, & Martin, J. (2011) . Instance-Based Learning Model of a Continuum of Social Information in Conflict Situations. In *Paper presented at the 2011 International Conference on Behavioral Decision Making*. Herzliya, Israel.

Dutt, V., & Gonzalez, C. (2011) . Reducing the Linear Perception of Nonlinearity: Use of a Physical Representation. In *Paper presented United States Society for Ecological Economics Conference*. East Lansing, Michigan, USA.

Dutt, V., Martin, J., & Gonzalez, C. (2011). Modeling Social Information In Conflict Situations Through Instance- Based Learning Theory. In *Poster presented at the 33rd annual meeting of the Cognitive Science Society*. Boston, Massachusetts, USA.

Dutt, V. (2011). Why Do We Want to Delay Actions on Climate Change? Effects of Probability and Timing of Climate Consequences. In *Paper presented at Princeton Graduate Student Conference on Psychology and Policymaking*. Princeton, NJ, USA.

Dutt, V. (2011). Why Do We Want to Delay Actions on Climate Change? Effects of Probability and Timing of Climate Consequences. In *Paper presented at the 4th Annual Graduate Student Appreciation Week "Impact with Innovation Exhibition."* Pittsburgh, PA, USA.

Dutt, V., Cassenti, D. N., & Gonzalez, C. (2011). Modeling a Robotics Operator Manager in a Tactical Battlefield. In *Paper presented at the IEEE Conference on Cognitive Methods in Situation Awareness and Decision Support*. Miami Beach, FL, USA.

Dutt, V., Young -Suk, A., & Gonzalez, C. (2011). Cyber Situation Awareness: Modeling the Security Analyst in a cyber-attack scenario through Instance-based Learning. In *Poster presented at the 20th Behavior Representation in Modeling & Simulation (BRIMS) Conference*. Sundance Resort, Utah, USA.

Gonzalez, C., & **Dutt, V.** (2011). Instance-based Learning Tool: Making Instance-based Learning Theory Usable, Transparent, and Understandable. In *Tutorial presented at the 20th Behavior Representation in Modeling & Simulation (BRIMS) Conference*. Sundance Resort, Utah, USA.

Cassenti, D. N., **Dutt, V.**, Gonzalez, C., Pomranky, R., & Hunn, B. (2011). Defining a Robotics Operator Manager's Responsibilities Using ACT-R. In *Paper presented at the 20th Behavior Representation in Modeling & Simulation (BRIMS) Conference*. Sundance Resort, Utah, USA.

Lejarraga, T., **Dutt, V.**, & Gonzalez, C. (2010). Instance-based Learning in Repeated Binary Choice. In *Paper presented at the 31st Annual Conference of the Society for Judgment and Decision Making*. St. Louis, MO, USA.

Gonzalez, C. & **Dutt, V.** (2010). Instance-based Learning: Integrating Decisions from Experience in Sampling and Repeated Choice Paradigms. In *Paper presented at 2010 Experience, heuristics, and choice: Prospects for bounded rationality workshop at Carnegie Mellon University*. Pittsburgh, PA, USA.

Arlo-Costa, H., Gonzalez, C., **Dutt, V.**, & Helzner, J. (2010). Decisions from Experience in Conditions of Uncertainty. In *Paper presented at 2010 Experience, heuristics, and choice: Prospects for bounded rationality workshop at Carnegie Mellon University*. Pittsburgh, PA, USA.

Dutt, V., & Gonzalez, C. (2010). Physical Representation and Linear Thinking on Climate Change. In *Paper presented at the 2010 Society of Risk Analysis Annual Meeting*. Salt Lake City, Utah, USA.

Gonzalez, C., & **Dutt, V.** (2010) . Instance-based Learning Models of Training. In *Paper presented at the 54th Annual Meeting of the Human Factors and Ergonomics Society*. San Francisco, CA, USA.

Proctor R.W., Yamaguchi, M., Gonzalez, C., & **Dutt, V.** (2010). Spatial Compatibility Effects in a Complex Task Environment. In *Paper presented at the 2010 American Psychological Association Convention*. San Diego, CA, USA.

Walter, W., **Dutt, V.**, Gluck, K., & Reitter, D. (2010). Results and Lessons Learned from the 2009 DSF Modeling Comparison Challenge. In *Symposium presented at the 2010 Behavioral Representation in Modeling Simulation conference*. Charleston, SC, USA

Dutt, V., & Gonzalez, C. (2009). Human Control of Climate. In *Poster presented at the 2009 Summer Institute on Bounded Rationality*. Berlin, Germany.

Dutt, V., & Gonzalez, C. (2009). Climate Risk Communication: A Cure for People's Mental Models. In *Paper presented at the 2009 Society of Risk Analysis Annual Meeting*. Baltimore, MD.

Lebiere, C., Gonzalez, C., **Dutt, V.**, Warwick, W. (2009). Predicting cognitive performance in open-ended dynamic tasks a modeling comparison challenge. In *Symposium at 2009 9th International Conference on Cognitive Modeling*. Manchester: UK.

Gonzalez, C., **Dutt, V.**, Healy, A., Young, M. & Bourne, L. (2009). Comparison of instance and strategy models in ACT-R. In A. Howes, D. Peebles, R. Cooper (Eds.), *9th International Conference on Cognitive Modeling – ICCM2009*, Manchester, UK.

Dutt, V., Yamaguchi, M., Gonzalez, C., & Proctor, R. (2009). An Instance-Based Learning Model of Stimulus-Response Compatibility Effects in Mixed Location-Relevant and Location-Irrelevant Tasks. In *Poster presented at 2009 9th International Conference on Cognitive Modeling*. Manchester: UK.

Dutt, V., & Gonzalez, C. (2009). A Model of Human Perceptions of Climate Change. In *Paper presented at American*

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Society for Engineering Education (ASEE) Spring 2009 Northeast Conference. Bridgeport, CT.

Dutt, V., & Gonzalez, C. (2009) . How do we perceive carbon-dioxide lifetimes? In *Paper presented at USSEE 2009 Conference.* Washington D.C., MD.

Dutt, V., & Gonzalez, C. (2009). Human “Mis”- perceptions of Climate Change. In *Paper presented at the HFES 53rd Annual Meeting.* San Antonio, TX.

Dutt, V., & Gonzalez, C. (2008). Human Perceptions of Climate Change. In *Paper presented at the 26th International Conference of the System Dynamics Society.* Athens, Greece.

Dutt, V., & Gonzalez, C. (2008). Human Perceptions of Climate Change. In *Paper presented at the 3rd Annual - Student Industrial Ecology Conference,* University of Pittsburgh – Benedum Hall, Kresge Auditorium Rm. 1175, Pittsburgh, PA.

Dutt, V., & Gonzalez, C. (2008). Human Perceptions of Climate Change. In *Paper presented at the 2008 American Psychological Association Convention’s Symposium Decision Making in Dynamic and Complex Environments.* Boston, MA, USA.

Dutt, V., & Gonzalez, C. (2008). Instance and strategy based models in ACT- R. In *Proceedings of 2008 Modeling, Simulation & Gaming (MS&G) Student Capstone Conference* (pp. 19). Suffolk, VA: ODU-VMASC.

Dutt, V., & Gonzalez, C. (2008). Instance and Strategy ACT-R models of choice in a dynamic control task: a model comparison story. *Proceedings of 2008 Fifteenth Annual Workshop and Summer School* (pp. 43). Pittsburgh, PA: ACT-R RESEARCH GROUP.

Dutt, V., & Gonzalez, C. (2008). Risk Perceptions of Climate Change. In *Paper presented at the 2008 Society of Risk Analysis Annual Meeting.* Boston, MA.

Young, M. D., Healy, A. F., Gonzalez, C., **Dutt, V.,** & Bourne, L. E., Jr. (2008). Effects of training with added relevant responses on RADAR detection. *The Experimental Psychology Society and the Psychonomic Society,* Chicago, IL.

Dutt, V., & Gonzalez, C. (2007). Slope of inflow impacts dynamic decision making. In *Paper presented at the 25th (2007) International Conference of the System Dynamics Society.* Boston, MA, USA.

Gonzalez, C., & **Dutt, V.** (2007). Learning to control a dynamic task: A system dynamics cognitive model of the slope effect. In Paper presented at the 8th International Conference on Cognitive Modeling, Ann Arbor, MI, 26th July 2007, 61-66.

Dutt, V., Schmerl, B., & Garlan, D. (Unpublished). Discovering Communication Protocols between Software Elements (runtime objects) in Software Architectures. Part of Independent Study taken when pursuing Master's in Software Engineering, Carnegie Mellon University, Pittsburgh, PA.

Dutt, V. & Kumar, S. (2006). Learning Transistor Characteristics using Neural Networks. *Published in ECCS 2006.* Patiala, India.

Dutt, V. & Thiagaraj, V. (2005). The Concept of Classification in Data Mining using Neural Networks. *Published in NCBC 2005.* Patiala, India.

EDITORSHIPS

- Associate Editor, *Frontiers in Cognitive Science* journal, <http://loop.frontiersin.org/people/48650/overview>
- Review Editor, *Frontiers in Neuroscience* journal, <http://loop.frontiersin.org/people/48650/overview>
- Editor, Special Issue on “Human decision-making in combat situations involving traditional and immersive visual technologies” in *Frontiers in Psychology (Cognitive Science)*
- Editor, Special Issue on “Adversarial Cybersecurity” in *Cybersecurity (Springer)*
- Editor, Special Issue on “Applications of Cognitive Approaches to Cyber Security” in *Frontiers in Cognitive Science* journal.
- Lead Author for Chapter 2 on “Integrated Risk and Uncertainty Assessment of Climate Change

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Response Policies” in Intergovernmental Panel on Climate Change (IPCC)’s 5th Assessment Report (AR5): <http://mitigation2014.org/contributor/chapter-2>

- Knowledge Editor, English Financial Daily, *Financial Chronicle*: <http://www.mydigitalfc.com/>

GRADUATE COMMITTEES

STUDENT NAME	POSITION	DATES
Neha Sharma	Advisor, Ph.D. Doctoral Committee	Graduated
Palvi Aggarwal	Advisor, Ph.D. Doctoral Committee	Graduated
Abhijeet Seth	Advisor, M. Tech. Thesis Committee	Graduated
Shivendra Sangar	Co-Advisor, Ph.D. Doctoral Committee	Graduated
Medha Kumar	Advisor, Ph.D. Doctoral Committee	Graduated
Pratik Chaturvedi	Advisor, Ph.D. Doctoral Committee	Thesis submitted
Akash K Rao	Advisor, M.S. Academic Progress Committee	Graduated
Zahid Maqbool	Advisor, Ph.D. Doctoral Committee	Graduated
Abhinav Choudhury	Advisor, Ph.D. Doctoral Committee	Graduated
Shruti Kaushik	Advisor, Ph.D. Doctoral Committee	Graduated
Praveen Kumar	Advisor, M.S. Academic Progress Committee	Graduated
Ankush Pathania	Advisor, M.S. Academic Progress Committee	Graduated
Tushar Saini	Advisor, M.S. Academic Progress Committee	Aug 2019 – Present
Gitanshu Choudhary	Advisor, Ph.D. Doctoral Committee	Jan 2020 – Present
Shashank Uttrani	Advisor, M.S. Academic Progress Committee	Jan 2020 – Present
Harsh Katakwar	Advisor, M.S. Academic Progress Committee	Jan 2020 – Present
Megha Sharma	Advisor, M.S. Academic Progress Committee	Aug 2021 – Present
Aadhaar Gupta	Advisor, M.S. Academic Progress Committee	Aug 2021 – Present
Akash K Rao	Advisor, Ph.D. Doctoral Committee	Aug 2021 – Present
Praveen Kumar	Advisor, Ph.D. Doctoral Committee	Jan 2021 – Present

SELECTED UNDERGRADUATE THESIS PROJECTS

Project: Generative Adversarial Networks Model for Soil Movement Prediction

Student: Vasu Gupta; Vyom Goel

Project: Evaluating the effectiveness of deception technology against different types of cyber-attacks in a deception game

Student: Yashika Baan

Project: Amalgamating cognitive and reinforcement learning models for replicating cognitive behavior for UGV-based search-and-rescue operations in a virtual environment

Student: Saransh Jain, Ashwin Ginoria

Project: Multi-step forecasting of pollutant parameters using multivariate data

Student: Vinayak Gupta

Project: Development of machine-learning models for glucose predictions from differential equation models.

Student: Aashima

Project: Development of machine-learning models for accelerometer vibration analyses.

Student: Sanchit Yadav

Project: Development of machine-learning models on soil movement predictions.

Student: Pavan and Raj Kumar

Project: Development of machine-learning models on air-pollution predictions.

Student: Suraj

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Project: AI models of exploration in VR-based built environments.
Student: Aditya Arora and Aman Saxena

Project: Development of time-series models for glucose predictions from differential equation models.
Student: Mukul and Karan (graduated)

Project: Development of machine-learning models for air-quality predictions.
Student: Gagandeep (graduated)

Project: Development of machine-learning models for soil movement predictions.
Student: Bharat Lodhi (graduated)

Project: Decision-making in cybersecurity games.
Student: Suryavanshi (graduated)

Project: Decision-making in climate change games.
Student: Sylvia Mittal (graduated)

Project: Investigating deep-learning models to forecast healthcare-related expenditures
Student: Pankaj Sheoran (graduated)

Project: Applying deep-learning to predict debris-flow at Tangni landslide on NH-58
Student: Abhijeet Sharma (graduated)

Project: Tool health monitoring using IoT and machine-learning
Student: Rushil Singhal and Amit (graduated)

Project: Developing a real-time cyber-security environment for studying deception in the laboratory
Student: Aksh and Vaibhav (graduated)

Project: Development of signalling system for narrow roads.
Student: Maeghel Puri, Partik Rajput, and Anindya
(graduated)

Project: Patient Finder Application.
Student: Amod Kumar Choudhary and Vinay Goel (graduated)

Project: Patient Journey Application.
Student: Saksham Bathla and Kapardi Trivedi
(graduated)

Project: Developing IVD, VR and AR defense applications in Unity.
Student: Priyanka (graduated)

Project: Evaluating different road traffic scenarios in a Computer-Based game.
Student: Sandesh Kumar Singh and Kumar Mehta (graduated)

Project: Visualization of Big Data in Pharma.
Student: Anzer Moid and Kaustubh Mallik (graduated)

Project: Development of a realistic battle scenarios.
Student: Jibraan Singh (graduated)

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Project: Emotion-based Social Networking App for Android.

Student: Chinmay Krishna (graduated)

Project: Investigating human understanding of Climate Change via Dynamic Climate Change Simulator.

Student: Afser Reza and Rishab Sahu (graduated)

Project: When Cyber Attacker Plays Nash equilibrium in Dynamic Security Game.

Student: Nidhi Manoj Makhijani (graduated)

Project: Effect of environmental and human conditions and human driving behavior.

Student: Vinod Kumar (graduated)

Project: Cognition in an IVD environment.

Student: Chandan Satyarthi (graduated)

Project: Affective, Expressive, and Cognitive Decision Making through Emotiv Epoc

Student: Mahesh Yadav, Khushali Modi, Divya Goyal (graduated)

Project: ACT-R Models of Driving Behavior

Student: Ajay Kumar, Jai Prakash

Project: Cyber Situation Awareness: Game Theoretic Analysis of Cyber Attacks

Student: Saumya Singh, Antra Grover

Project: Cyber Situation Awareness: Testing the Effects of Similarity and Attack Strategy on Cyber Attack Detection

Student: Amanjot Kaur (graduated)

Project: Cyber Situation Awareness: Testing the Effects of Tolerance and Attack Strategy on Cyber Attack Detection

Student: Aman Arora (graduated)

Project: Cyber Situation Awareness: Testing the Effects of Recency and Inertia on Cyber Attack Detection

Student: Ramakrishna Reddy and Basava Kanaparthi (graduated)

Project: Effects of feedback, social norms, and competition on energy conservation behavior

Student: Ishansh Singh, Shammash Mohyaddin, Sunanda Yadav, Devang Moyal (graduated)

Project: Decisions from experience in sampling: Sampling strategies, sample size, and final choice

Student: Pankaj Sharma, Nikhil Kumar Gupta, Ashish Gupta (graduated)

Project: Charting Indigenous Populations in the World (co-advising with Prof. Rajeshwari Dutt)

Student: Devinder Yadav, Shekhar Solanki (graduated)

Project: Archiving the history of IIT, Mandi (co-advising with Prof. Rajeshwari Dutt)

Student: Nishant Goyal, Divya Gandhi (graduated)

AD-HOC REVIEWER OF JOURNALS

Journal of Behavioral Decision Making, Journal of Environmental Psychology, Global Environment Change, System Dynamics Review, Organizational Behavior and Human Decision Processes, Journal of Cognitive Engineering and Decision Making, Cognitive Systems Research, Environmental Science & Policy, Information Fusion, Frontiers in Decision Neuroscience, Frontiers in Cognitive Science.

AWARDS, HONORS AND INVITED TALKS

HONOR	YEAR
SKOCH Award (Gold), Safety & Security for Landslide Monitoring and Warning System	2020
Organizer, UKIERI – DST international workshop on adversarial cybersecurity	2020
ACT-R tutorial as part of the One Week Short Course/FDP on Cognition and Computation, IIT Roorkee	2020
Member of Editorial Board of <i>Management and Business Review (MBR)</i> journal	2019
Founder of first faculty-led start-up at IIT Mandi, iloTs	2019
Organizer, Winter School on Cognitive Modeling, IIT Mandi	2019, 2020
Senior Member, IEEE	2018
3rd Prize, Development of Innovative prototypes for disaster risk reduction, HP Government	2018
Special Topics Editor, <i>Frontiers in Cognitive Science</i>	2017
Member of Program Committee of IEEE 2017 International Symposium on Computational and Business Intelligence (ISCBI 2017)	2017
Member of Program Committee of IEEE Cyber Incident 2017: International Conference On Cyber Incident Response, Coordination, Containment & Control	2017
Member of Program Committee of IEEE Social Media 2017: International Conference On Social Media, Wearable And Web Analytics	2017
Best student paper award at AHFE 2016	2016
Review Editor, <i>Frontiers in Decision Neuroscience</i>	2016
Member of Program Committee of IEEE Cyber SA 2016, London, UK	2016
Best paper award in IEEE International Conference on Cyber Situational Awareness, Data Analytics and Assessment (CyberSA 2015)	2015
Review Editor, <i>Frontiers in Cognitive Science</i>	2015
Member of Program Committee for ACM IUI 2015	2015
Member of Technical Committee of the Confluence: The Next Generation Information Technology Summit 2014	2014
Invited speaker at the Energy and Sustainability Conference ISB Mohali	2014
Invited for the IEEE/PES Talk on "Decisions from Experience reduce Misconceptions on Climate Change" at Pittsburgh, USA	2014
Member of Technical Program Committee/Advisory Committee for the 2013 IEEE International Conference on MOOC, Innovation and Technology in Education (MITE)	2013
Technical Theme Chair for Theme V: Economics of Knowledge Management at the 2013 IEEE Conference on Information Management in the Knowledge Economy (IMKE)	2013
Invited for the United Nation's Fourth Lead Author Meeting (LAM4) on IPCC (WG III) 5th Assessment Report (AR5) in Addis Ababa, Ethiopia	2013
Invited talk at a 2-day workshop on "Decision Making and the Environment" at University of Heidelberg, Germany	2013
Lead Author for Chapter 2 on "Integrated Risk and Uncertainty Assessment of Climate Change Response Policies" in IPCC (WG III) 5th Assessment Report (AR5)	2013
Reached the final round of MIT Technology Review Young Innovators Under 35 Awards, 2013	2013
Keynote talk in the plenary session (titled "Promising Young Indian Contributors") at NAOP	2012
Two Papers accepted in the journal <i>Psychological Review</i>	2011, 2012
Marquis Who's Who of the World	2006 – Present
1000 Greatest Minds of 21st Century	2008
Runner-up prize in the Market Entry Prediction Competition,	2008
Tutorial presenter at BRIMS 2011 Conference, Sundance Resort, UT	2011
Panel discussion at BRIMS 2010 Conference, Charleston, SC	2010
Talk on VB-ACT-R Tutorial, RMPA Conference, Denver, CO	2010
Talk in EESM Seminar Steinbrenner Institute, Carnegie Mellon	2009
Talk at Dynamic Decision-Making Lab, Carnegie Mellon	2007, 2009,
	2010, 2011
Talk at Carnegie Mellon's Graduate Student Appreciation Week 2011	2011

ACTIVITIES AND AFFILIATIONS

Senior member of Institute of Electrical and Electronics Engineers (IEEE), Inc, USA (www.ieee.org)
Member of System Dynamics Society (SDS), USA (<http://www.systemdynamics.org>)
Member of Society of Risk Analysis (SRA), USA (<http://www.sra.org/>)
Member of Division 34 [Population and Environmental Psychology], American Psychological Association, USA (<http://www.apa.org/divisions/div34/>)
Member of Society of Judgment and Decision Making, USA (www.sjdm.org)

SELECTED MEDIA COVERAGE

Please see: <https://rb.gy/nhd2lr>

REFERENCES

Dr. Cleotilde Gonzalez Professor Dept. Social & Decision Sciences Carnegie Mellon University Porter Hall, Pittsburgh, PA 15213 Email: coty@cmu.edu	Dr. Deepak Garg Professor and Head of Department Department of Computer Engineering Bennett University Greater Noida, India-201310 Email: deepak.garg@bennett.edu.in	Dr. Rajesh Kumar Bhatia Professor Computer Science and Engineering PEC University of Technology Sector 12, Chandigarh 160012 Email: rbhatia@pec.ac.in
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